

Claims

1. Use of at least one hydrocarbon compound having a carbon chain of two to six carbon atoms carrying two or three hydroxyl groups in an inkjet printing ink composition as a non-particulate matting compound for adapting the gloss of a printed marking to the gloss of a substrate carrying said marking, such that said marking is not discernible by an unaided eye.
2. Use according to claim 1, characterised in that the matting compound is incorporated into the composition in an amount ranging from 0.5 to 10 weight-%, preferably from 1.0 to 8.0 weight-% of the overall composition.
3. Use according to claim 1 or 2, characterised in that the matting compound is selected from the group consisting of 1,5-pentanediol, ethylenediol, butanediol, propanediol, glycerol and mixtures thereof.
4. Use according to one of claims 1 to 3, characterised in that the inkjet printing ink composition comprises at least one solvent, at least one binder, at least one marking compound absorbing light outside the visible wavelength range, and optionally additives.
5. Use according to claim 4, characterised in that the solvent is selected from the group consisting of ketones, acetate esters, alcohols and mixtures thereof.
6. Use according to claim 5, characterised in that the solvent is selected from the group consisting of acetone, methyl ethyl ketone, ethyl acetate, methyl acetate, methanol,

isopropanol, isopropyl acetate, ethanol, propanol and mixtures thereof.

7. Use according to one of claims 4 to 6, characterised in that the amount of solvent ranges from 40 to 95 weight-%, preferably from 70 and 90 weight-% of the overall ink composition.
8. Use according to one of claims 4 to 7, characterised in that the binder comprises a resin selected from the group consisting of vinylic-, cellulosic-, acrylic-, polyacetalic-, styrene-maleic copolymer resins and mixtures thereof.
9. Use according to one of claims 4 to 8, characterised in that the binder is incorporated in the composition in an amount ranging from 3 to 30 weight-%, preferably from 4 and 20 weight-% of the overall ink composition.
10. Use according to one of claims 4 to 9, characterised in that the additives comprise at least one conductivity salt, a humectant and/or a stabilizer.
11. Use according to claim 10, characterised in that the conductivity salt is selected from the group consisting of lithium nitrate, alkyl ammonium acetate, potassium acetate and mixtures thereof.
12. Use according to one of claim 10 or 11, characterised in that the conductivity salt is included in the composition in an amount ranging from 0.3 to 5 weight-%, preferably between 0.5 and 3 weight-% of the overall ink composition.

13. Use according to one of claims 4 to 12, characterized in that the marking compound is incorporated in the composition in an amount ranging from 0.0001 to 10 weight-%, preferably from 0.01 to 2 weight-% of the overall ink composition.
14. A substrate carrying a printed security marking, preferably printed with an inkjet printing ink composition comprising a non-particulate matting compound, with preferably at least one hydrocarbon compound having a linear or branched carbon chain of two to six carbon atoms carrying two or three hydroxyl groups, wherein said security marking is adapted to the gloss of the substrate.
15. Method of applying an invisible security marking to a substrate, comprising the steps of:
 - providing an inkjet printing ink comprising at least one non-particulate matting compound; and
 - printing with said ink a security marking on a substrate, wherein the gloss of the printed security marking is adapted to the gloss of the substrate,characterised in that said at least one non-particulate matting compound is a hydrocarbon compound having a linear or branched carbon chain of two to six carbon atoms carrying two or three hydroxyl groups.
16. Inkjet printing ink comprising at least one solvent, at least one binder and at least one marking compound, said marking compound absorbing light of a non-visible wavelength, and optionally additives, characterised in that the ink further comprises a non-particulate matting compound selected from the group of hydrocarbon compounds having a linear or branched carbon chain of two to six carbon atoms carrying two or three hydroxyl groups.